AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1. (Currently amended) In a picture archiving and communication system (PACS), a method of processing raw image data at a PACS display workstation, the method comprising:

retrieving from a PACS database, using a PACS display workstation, raw image data, which has not been fully preprocessed according to a predetermined **sub**set of preprocessing functions **applied to said raw image data at an acquisition workstation**, delivered from an imaging modality;

selecting from a PACS database, using the PACS display workstation, a first preprocessing function for the raw image data**, which has not been fully preprocessed according to said predetermined subset of preprocessing functions applied at said acquisition workstation,** delivered from the imaging modality,

wherein said first preprocessing function is stored in said PACS database, said first preprocessing function differing from ~~**a preprocessing function inserted in or applied to said raw image data**~~ **said predetermined subset of preprocessing functions**; and

processing said raw image data**, which has not been fully preprocessed according to said predetermined subset of preprocessing functions applied at said acquisition workstation,** at the PACS display workstation by applying the first preprocessing function to the raw image data to create resultant image data.

2. (Original) The method of claim 1, wherein the step of retrieving raw image data further comprises retrieving frequency preprocessed raw image data.

3. (Previously presented) The method of claim 1, wherein the step of retrieving raw image data further comprises retrieving contrast preprocessed raw image data.

4. (Original) The method of claim 2, wherein the step of selecting further comprises selecting a contrast preprocessing function.

5. (Original) The method of claim 3, wherein the step of selecting further comprises selecting a frequency preprocessing function.

6. (Original) The method of claim 4, wherein the step of selecting further comprises selecting a contrast preprocessing function characterized by at least one of a GT, GA, GC, and GS preprocessing parameter.

7. (Original) The method of claim 5, wherein the step of selecting further comprises selecting a frequency preprocessing function characterized by at least one of a RN, RE, and RT preprocessing parameter.

8. (Original) The method of claim 1, further comprising the step of applying an image processing function to the resultant image data to create processed resultant image data.

9. (Original) The method of claim 8, further comprising the step of displaying the processed resultant image data.

10. (Original) The method of claim 1, further comprising the step of storing the resultant image data in the PACS database for future retrieval.

11. (Currently amended) In a picture archiving and communication system (PACS), a PACS display workstation comprising:

a processing circuit;

a PACS network interface coupled to the processing circuit; and

a software memory coupled to the processing circuit, the software memory storing instructions for:

retrieving from a PACS database raw image data**, which has not been fully preprocessed according to a predetermined subset of preprocessing functions applied to said raw image data at an acquisition workstation,** delivered from an imaging modality;

selecting from a PACS database a first preprocessing function for the raw image data**, which has not been fully preprocessed according to said predetermined subset of preprocessing functions applied at said acquisition workstation,** delivered from the imaging modality,

wherein said first preprocessing function is stored in said PACS database, said first preprocessing function differing from ~~**a preprocessing function inserted in or applied to said raw image data**~~ **said predetermined subset of preprocessing functions**; and

processing said raw image data**, which has not been fully preprocessed according to said predetermined subset of preprocessing functions applied at said acquisition workstation,** at the PACS display workstation by applying the first preprocessing function to the raw image data to create resultant image data.

12. (Original) The PACS display workstation of claim 11, wherein the raw image data corresponds to an anatomical region, and wherein the preprocessing function is selected based on the anatomical region.

13. (Original) The PACS display workstation of claim 11, wherein the raw image data is frequency processed raw image data.

14. (Original) The PACS display workstation of claim 11, wherein the raw image data is contrast preprocessed raw image data.

15. (Original) The PACS display workstation of claim 13, wherein the preprocessing function is a contrast preprocessing function.

16. (Original) The PACS display workstation of claim 14, wherein the preprocessing function is a frequency preprocessing function.

17. (Original) The PACS display workstation of claim 15, wherein the contrast preprocessing function characterized by at leas tone of a GT, GA, GC, and GS preprocessing parameter.

18. (Original) The PACS display workstation of claim 16, wherein the frequency preprocessing function characterized by at least one of a RN, RE, and RT preprocessing parameter.

19. (Original) The PACS display workstation of claim 11, wherein the software memory further comprises instructions for applying an image processing function to the resultant image data.

20. (Original) The PACS display workstation of claim 11, wherein the software memory further comprises instructions for storing the resultant image data in the PACS database for future retrieval.

21. (Currently amended) A medical data network comprising:

an image modality;

an image acquisition workstation;

a PACS network interfaced to the image acquisition workstation, the PACS network comprising a networked PACS image database, a PACS display workstation, and a preprocessing database, and wherein the PACS display workstation comprises:

a processing circuit;

a PACS network interface coupled to the processing circuit; and

a software memory coupled to the processing circuit, the software memory storing instructions for:

retrieving from a PACS database raw image data**, which has not been fully preprocessed according to a predetermined subset of**

preprocessing functions applied to said raw image data at an acquisition workstation, delivered from an imaging modality,

wherein said first preprocessing function is stored in said PACS database, said first preprocessing function differing from ~~**a preprocessing function inserted in or applied to said raw image data**~~ **said predetermined subset of preprocessing functions**;

selecting from a PACS database a first preprocessing function for the raw image data delivered from the imaging modality; and

processing said raw image data**, which has not been fully preprocessed according to said predetermined subset of preprocessing functions applied at said acquisition workstation,** at the PACS display workstation by applying the first preprocessing function to the raw image data to create resultant image data.

22. (Original) The medical data network of claim 21, wherein the first preprocessing function is a contrast preprocessing functions.

23. (Original) The medical data network of claim 22, wherein the contrast preprocessing function characterized by at least one of a GT, GA, GC, and GS preprocessing parameter.

24. (Original) The medical data network of claim 21, wherein the first preprocessing function is a frequency preprocessing function.

25. (Original) The medical data network of claim 24, wherein the frequency preprocessing function characterized by at least one of a RN, RE, and RT preprocessing parameter.

SUBSTANCE OF TELEPHONE INTERVIEW

On June 2, 2004, at the request of the Applicant, a telephone interview was conducted with the Examiner. The substance of the interview included:

1) No exhibits shown or demonstrations conducted.
2) A discussion of the rejection of claim1 under 35 U.S.C. § 112, ¶ 1. In addition, the rejection of claims 11 and 21 under 35 U.S.C. § 112, ¶ 1 were also discussed briefly with regard to the applicability of the rejection of claim 1 to claims 11 and 21.
3) A brief discussion of Huang, "PACS Basic Principles and Applications" occurred. However, the Examiner, in light of the claim amendments proposed by the Attorney for Applicant to overcome the 35 U.S.C. § 112, ¶ 1 rejection, did not permit any substantive discussion of any of the 35 U.S.C. §§ 102, 103 rejections in light of any of the cited references.
4) The Applicant agreed to amend claims 1, 11 and 21 as they are currently amended in this Amendment. However, to clarify the Attorney for Applicant's statements made during the interview, Attorney for Applicant indicated that a subset of preprocessing functions are applied to the raw image data at the acquisition workstation and a different preprocessing function is subsequently applied to the image data at the display workstation. While a set of preprocessing functions may be applied to the image data at the display workstation, a singular preprocessing function may be applied as well.

5) The Applicant requested clarification of the Examiner's 35 U.S.C. § 112, ¶ 1 rejection. The Applicant did argue that the claims prior to the current Amendment were supported by the specification. The Applicant did agree with the Examiner to amend claims 1, 11 and 21 so as to clarify the scope of the claims.

6) The Applicant requested discussion of the 35 U.S.C. §§ 102, 103 rejections, but was refused by the Examiner, as described above. The Examiner stated that the amendments proposed by the Applicant would require an additional search.

7) The Applicant agreed to amend claims 1, 11 and 21 to clarify the scope of the claims.